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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,253	08/04/2003	Tomoyuki Ohzeki	FSF-031431	6336

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EXAMINER

CHEA, THORL

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/633,253	Applicant(s) OHZEKI ET AL.	
	Examiner Thorl Chea	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 10-20 is/are rejected.
- 7) ☐ Claim(s) 4-6, 8 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>08042003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 10-15, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai et al (US Patent No. 6,090,538). See columns 53-57, example 3 and samples in Table 10, samples B that contains hydrazine I-4, I-7, I-8. The material a hydrazine compound having associated therewith a mercapto compound having property within the meaning of "a compound having a group that is absorptive to the silver halide and a group that reduces silver halide, or a precursor of a compound that having a group that is adsorptive to silver halide and the group that reduces silver halide". The mercapto moiety is part of the group that adsorbs to silver halide and the hydrazine moiety is part to reduce the silver halide. Accordingly, the photothermographic as claimed lacks novelty.

3. Claims 1, 10-15 are rejected under 35 U.S.C. 102(b) as anticipated by Okada et al (US Patent No. 6,120,983). See the composition of the photothermographic material of Okada in the abstract which contains known silver salt, photosensitive silver halide, reducing agent and binder; the exemplified compounds in columns 11-20 compounds 1-55 which contains a compound having property within the scope of "a compound having a group that is adsorptive to silver halide and a group that reduces a silver halide, or a precursor of the compound having a group that is adsorptive to silver halide and a group

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that reduces a silver halide" claimed in the present claimed invention. Okada discloses a material within the scope as claimed, and therefore, the claimed invention lacks novelty.

4. Claims 1-3, 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US Patent No. 6,120,983). See silver halide including silver iodide and silver bromoiodide in column 36, lines 4-15; the size of silver halide from 20 nm to 120 nm in column 35, lines 38-50; binder including poly(vinylbutyral) in column 41, lines 13-52. See also the composition of the material in the abstract and exemplified compounds in columns 11-20 compounds 1-55 which contains a compound having property within the scope of "a compound having a group that is adsorptive to silver halide and a group that reduces a silver halide, or a precursor of the compound having a group that is adsorptive to silver halide and a group that reduces a silver halide" claimed in the present claimed invention. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the known silver iodide, silver iodobromide in combination with known binder such as poly(vinylbutyral) and a compound having a group that is adsorptive to silver halide and a group that reduces a silver halide, or a precursor of the compound having a group that is adsorptive to silver halide and a group that reduces a silver halide with an expectation of success, and thereby provide a material as claimed

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-3, 7, 10-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Katoh et al (US Patent No. 5,968,725). See Katoh as a whole which discloses a photothermographic material having silver halide, an organic silver salt, a reducing agent and ultrahigh contrast promoting agent having a group for promoting adsorption to silver halide. See the exemplified compound in columns 5-6, compound I-2 to I-4; columns 7-8, compound I-6-I-8; columns 13-17, compound I-23. The compounds contain the mercapto moiety which is part of the group that adsorb to silver halide and the hydrazine moiety, which is part to reduce the silver halide. The compounds I-23 contains the ring  $-N-C=O$  within the meaning lactam ring. See also the compound in column 75, compound I-18 which contains a mercapto moiety and a phenyl substituted with hydroxyl group; the group for promoting adsorption to silver halide in column 49-50, to lines 51, lines 1-3; the silver halide including silver iodide in column 92, lines 61-68; the binder in column in 92, lines 6-20, including poly(vinylbutyral), and the binder may be dispersed in water, organic solvent, or emulsion to form a dispersion which is coated to form a layer. Katoh teaches both the use of the compound of present claimed invention such as shown above. Therefore, the invention as claimed lacks novelty; alternatively, it would have been obvious to the worker of ordinary skill in the art the time the invention was made to use the compound within the scope of hydrazine disclosed therein with an expectation of achieving a material with high image contrast, and thereby obtained a material as claimed.

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
7. Claims 4-6, 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea   
October 27, 2004

Thorl Chea  
Primary Examiner  
Art Unit 1752

